

Light efficiency:



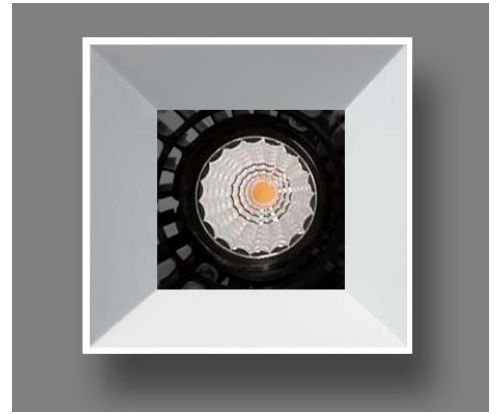
Output: 1989 lm

Light quality:

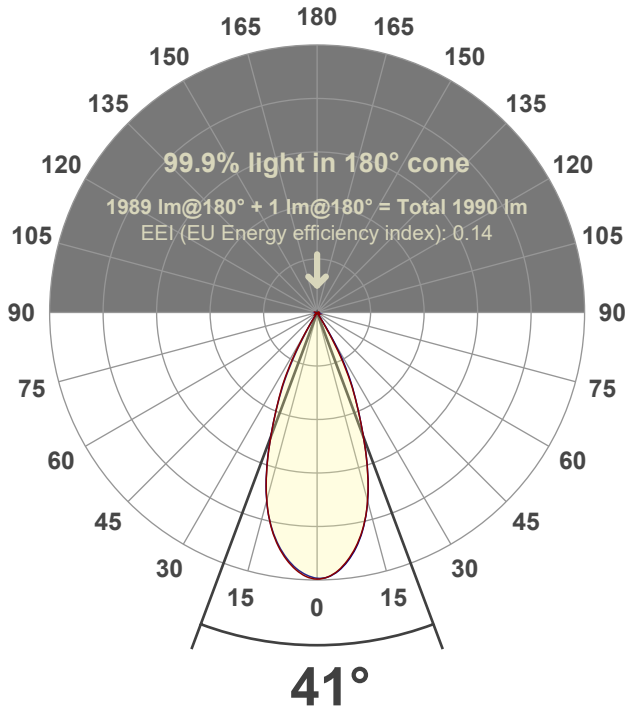


Peak: 4464 cd

Power: 20.7 W



Beam angle



Test number:

GR-O-F-CZ20-30k-FL-SQ-Rev2

Luminaire Model:

Graffiti Open Square Fixed Downlight-CZ20 30k 38° Optic

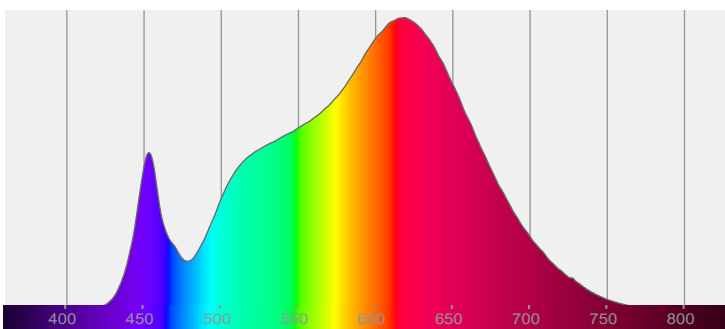
Date and time:

6/30/2022 8:08:15 PM

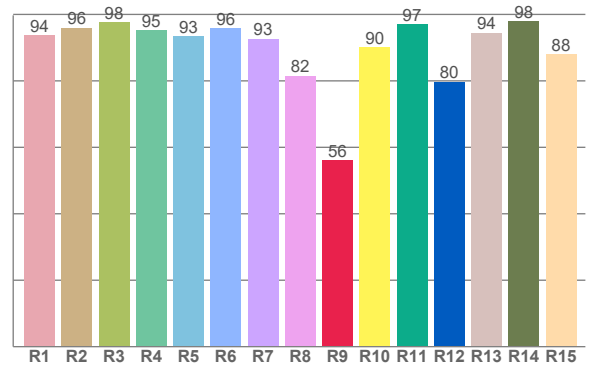
Delivered Lumens

1989

Spectra



CRI: 93.2 (R1-R8)



Color parameters

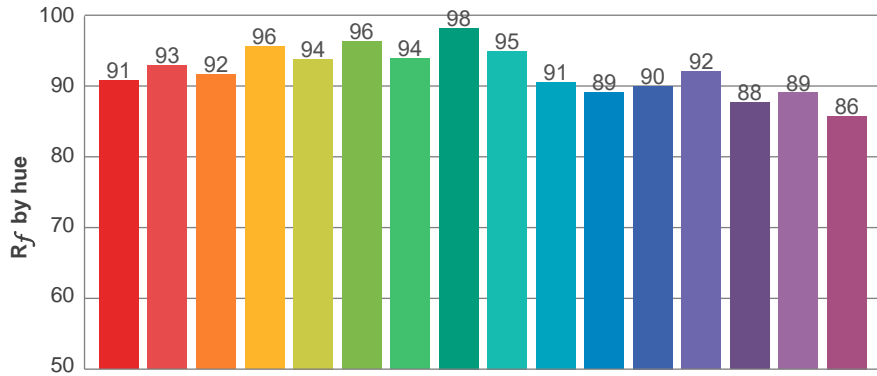
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	93.2	56.2	92.2	99.1	91.7	0.436	0.408	0.249	0.348	0.0015

R_f 92.2
Fidelity index R_f

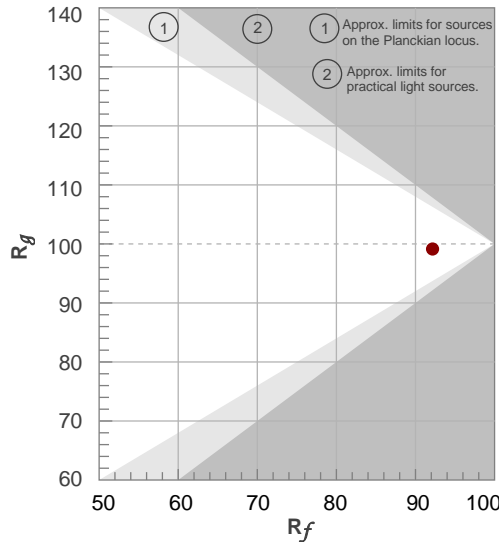
R_g 99.1
Gammut index R_g

TM30: 92.2

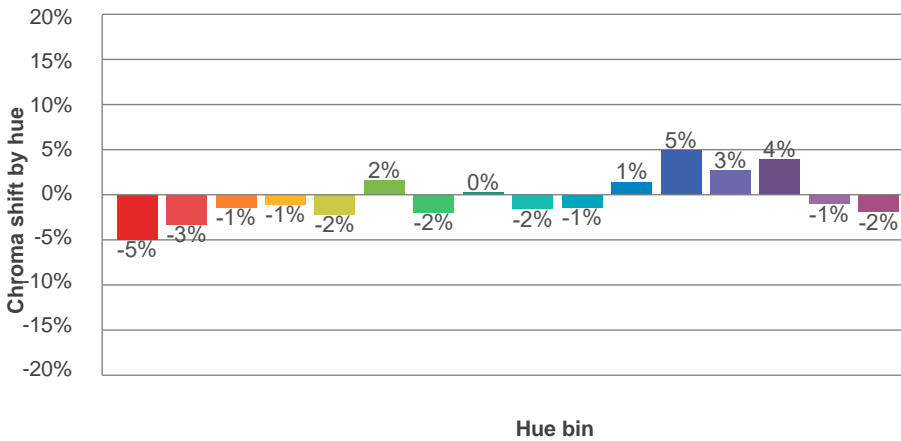
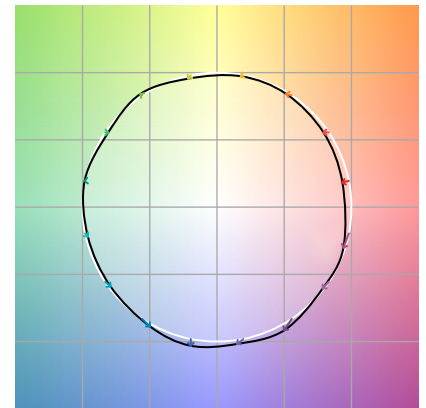
TM-30Color



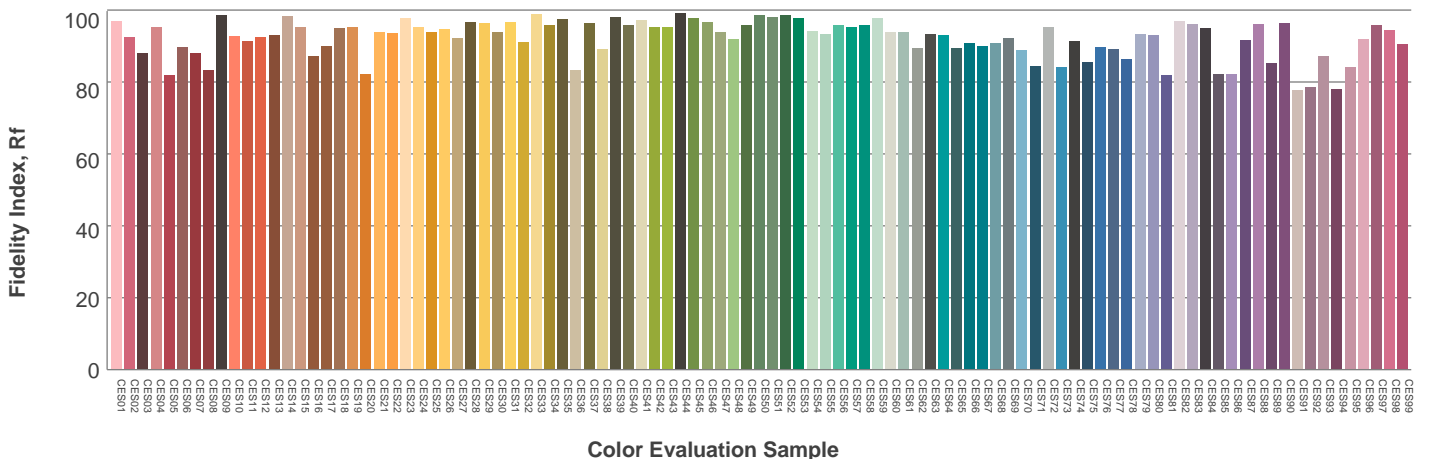
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	2%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	3%
10	91	-1%	5%
11	89	1%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-7%
16	86	-2%	-11%



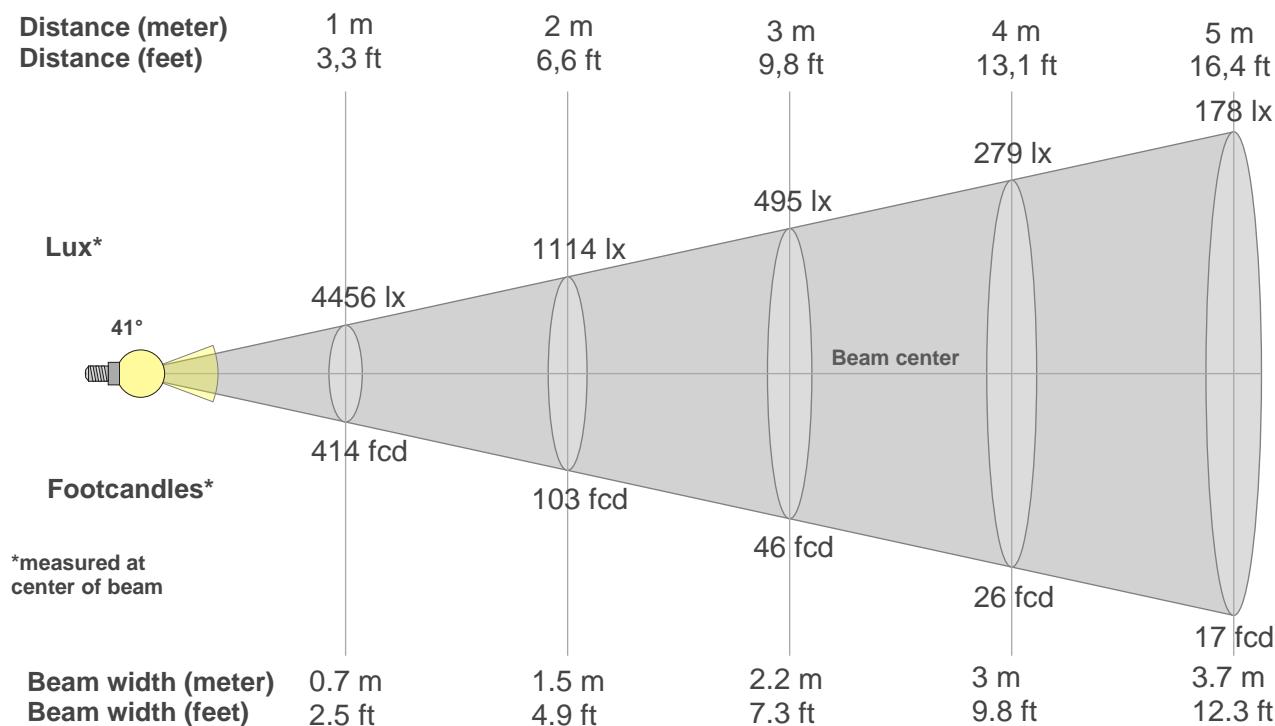
Color vector graphics



Color distortion



Beam details



Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
4456lx	1114lx	495lx	279lx	178lx	124lx	91lx	70lx	55lx	45lx	37lx	31lx	26lx	23lx	20lx	17lx	15lx	14lx	12lx	11lx
414fcd	103.5fcd	46fcd	25.9fcd	16.6fcd	11.5fcd	8.4fcd	6.5fcd	5.1fcd	4.1fcd	3.4fcd	2.9fcd	2.4fcd	2.1fcd	1.8fcd	1.6fcd	1.4fcd	1.3fcd	1.1fcd	1fcd

Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4456	4437	4363	4247	4096	3913	3692	3426	3096	2725	2327	1939	1585	1247	875	490	196	52	18	12
100%	100%	98%	95%	92%	88%	83%	77%	69%	61%	52%	44%	36%	28%	20%	11%	4%	1%	0%	0%

Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4456	4434	4369	4260	4113	3929	3704	3430	3103	2728	2330	1942	1595	1295	973	610	287	89	22	15
100%	100%	98%	96%	92%	88%	83%	77%	70%	61%	52%	44%	36%	29%	22%	14%	6%	2%	0%	0%

Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4456	4431	4354	4239	4090	3907	3686	3414	3091	2724	2327	1937	1586	1265	894	514	212	55	18	14
100%	99%	98%	95%	92%	88%	83%	77%	69%	61%	52%	43%	36%	28%	20%	12%	5%	1%	0%	0%

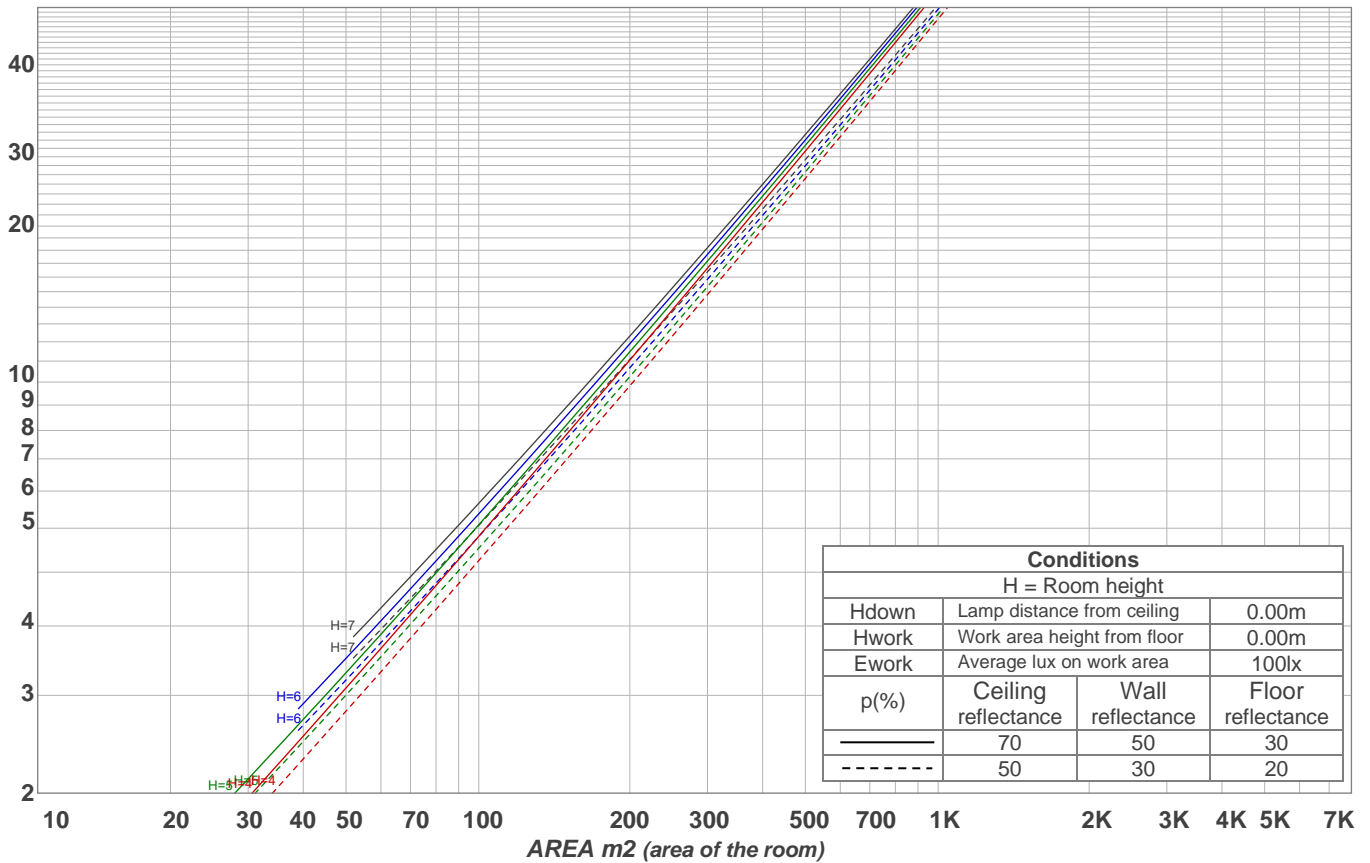
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4456	4406	4327	4214	4068	3889	3675	3419	3099	2729	2330	1934	1559	1198	792	408	149	37	17	12
100%	99%	97%	95%	91%	87%	82%	77%	70%	61%	52%	43%	35%	27%	18%	9%	3%	1%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
41°	60.7°	65.7°	99.4%	99.2%

LAMPS (number of lamps)
50

Light planning Luminaire budgetary diagram



Luminaire budgetary diagram AREA m2 (area of the room) Coefficients of Utilization

Ceiling reflectance	80				70				50			30			10			0			
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
RCR	(RCR: Room Cavity Ratio)																				
	Room Values are expressed as percentage of Lumens delivered to the task surface																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	
3	106	101	97	94	104	99	96	93	97	94	91	95	92	90	92	90	89	87	87	87	
4	102	96	92	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83	83	83	
5	98	92	87	84	97	91	86	83	89	85	83	88	84	82	86	83	81	80	80	80	
6	95	88	83	80	94	87	83	79	86	82	79	84	81	78	83	80	78	77	77	77	
7	92	84	79	76	90	84	79	76	82	78	75	81	78	75	80	77	75	74	74	74	
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71	71	71	
9	85	78	73	70	84	77	73	70	76	72	69	76	72	69	75	71	69	68	68	68	
10	82	75	70	67	82	74	70	67	74	70	67	73	69	67	72	69	66	65	65	65	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
398 lm	890 lm	624 lm	57.9 lm	4.64 lm	2.67 lm	2.83 lm	4.04 lm	3.96 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm